



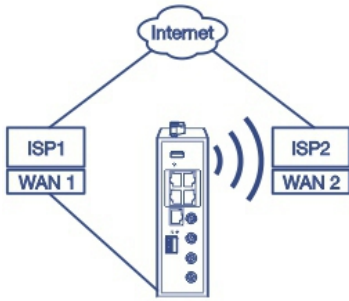
## Industrial AC1200 Wireless Gigabit PoE+ Router

TI-WP100 (v1.0R)

- Industrial AC1200 Dual-Band Wireless
- 4 x Gigabit PoE+ ports, 1 x Gigabit WAN port
- PoE power budget: 120W@48V DC input, 120W@24V DC input
- PoE alive check restarts unresponsive PoE powered devices
- PoE power scheduling, power limit, and port priority
- Hardened IP30 rated metal housing
- Operating temperature range of -30° – 70° C (-22° – 158° F)\*
- Up to 8 SSIDs per band
- SSID to VLAN mapping
- Wireless WAN support (WAN load balancing/failover between wired Ethernet WAN and Wireless WAN)
- 802.1Q/Port-based VLAN support
- Inter-VLAN routing
- IPsec & SSL VPN (OpenVPN) support
- Redundant power inputs with overload current protection
- Digital input/output
- Modbus serial port and virtual COM support
- Power supply sold separately (models: TI-S12048, TI-S12024, TI-S24048)
- Optional Magnetic WiFi Antenna base, model TEW-LB101 (sold separately)

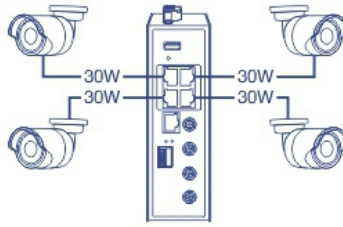
TRENDnet's Industrial AC1200 Wireless Dual Band Gigabit PoE+ Router, model TI-WP100, features dual-band AC1200 WiFi to maximize device networking speeds; it is equipped with an 867Mbps Wireless AC network, and a 300Mbps Wireless N network. It supports dual-WAN hybrid connections (Ethernet for load balancing or fail-over modes, and encrypted Virtual Private Network (VPN) access for remote users. Four gigabit PoE+ ports enable users to power access points, IP cameras, and other PoE+ devices directly from the router. Supports both PoE (802.3af) and PoE+ (802.3at) devices with a 120W PoE power budget. The Industrial AC1200 gigabit router is equipped with an IP30 rated metal housing, and designed to operate within a wide temperature range of -30° – 70° C (-22° – 158° F) for industrial environments.

Advanced traffic management controls, troubleshooting, and SNMP monitoring support make this a powerful solution for SMB networks. This wireless router features advanced management, QoS, VLAN, VPN, and other capabilities to ensure optimal performance, scalability, and protection of your network. Intelligently manage your offices' web access with our advanced content filtering tool, increase employee productivity, and finally take control of your internet.



### Dual-WAN

Connect up to two separate WAN internet connections (Ethernet & WiFi) to efficiently load-balance traffic, or configure for redundancy using the WAN fail-over mode.



### PoE+

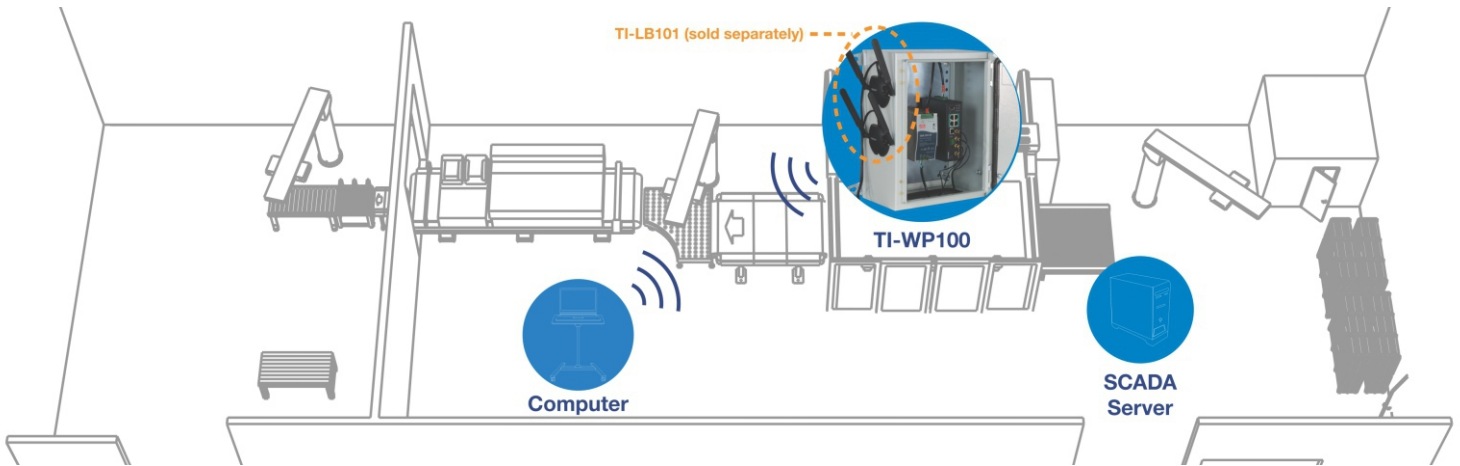
Four gigabit PoE+ ports power APs, IP cameras, and other PoE+ devices directly from the router. Supports both PoE (802.3af) and PoE+ (802.3at) devices with a 120W PoE power budget.



### AC1200 WiFi

Features dual-band AC1200 WiFi to maximize device networking speeds; it's equipped with an 867Mbps Wireless AC network, and a 300Mbps Wireless N network.

## NETWORKING SOLUTION



## FEATURES



### Dual-WAN

Connect up to two separate WAN internet connections (Ethernet & WiFi) to efficiently load-balance traffic by distributing network traffic over the wired and wireless WAN connections, or configure for redundancy using the WAN fail-over mode



### Dual-Band WiFi

Features dual-band WiFi to maximize device networking speeds; it's equipped with an 867Mbps 802.11ac network, and a 300Mbps Wireless N network



### Gigabit PoE+

Four gigabit PoE+ ports allow users to power access points, IP cameras, and other PoE+ devices directly from the router. Supports both PoE (802.3af) and PoE+ (802.3at) devices with a 120W total PoE power budget



### Ports

4 x Gigabit PoE+ ports, 1 x Gigabit WAN port



### Pre-Encrypted Wireless

For your convenience the router's WiFi bands are pre-encrypted with their own unique passwords



### VPN

Supports IPsec and SSL VPN protocols for encrypted remote access to local area network (LAN) resources over the internet



### Inter-VLAN Routing

Provides routing capabilities between VLANs



### QoS

Intelligently prioritize voice, video, and other data traffic to improve network efficiency and overall performance



### DIN-Rail Mount

Metal enclosure with integrated DIN-rail mount



### Management

Supports web browser (HTTP, HTTPS), CLI (Telnet / SSHv2), SNMP, and TR-069 management



### Wide Temperature Range

A wide operating temperature range of -30° – 70° C (-22° – 158° F)\*allows for installations in extreme hot or cold environments

8-pin removable terminal block (primary/RPS power inputs & digital input/output)

1 x USB 2.0 (Log Storage)  
Reset button

4 x Gigabit PoE+ ports

1 x Gigabit WAN port

4-pin removable terminal block

RS-232/RS-485 serial port (Modbus)

4 x RP-SMA antenna connectors (2 x 2.4GHz/5GHz WLAN, 2 x 5GHz)

LED indicators

Front



Back

4 x detachable dual-band antennas



DIN-Rail mount

Network cable (1.5m / 5 ft.)

## SPECIFICATIONS

### Standards

- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3x
- IEEE 802.3ab
- IEEE 802.1Q
- IEEE 802.1X
- IEEE 802.11a
- IEEE 802.11b
- IEEE 802.11g
- IEEE 802.11n (up to 300Mbps @ 256QAM)\*
- IEEE 802.11ac (5GHz: up to 867Mbps @ 256QAM)\*
- IEEE 802.3af
- IEEE 802.3at

### Device Interface

- 4 x Gigabit PoE+ ports
- 1 x Gigabit WAN port
- 2 x Wireless WAN uplink (2.4GHz or 5GHz)\*
- 1 x USB 2.0 (Log Storage)
- 4 x RP-SMA antenna connectors (2 x 2.4GHz/5GHz WLAN, 2 x 5GHz)
- 8-pin removable terminal block (primary/RPS power inputs & digital input/output)
- 4-pin removable terminal block RS-232/RS-485 serial port (Modbus)
- LED indicators
- Reset button

### VPN

- SSL VPN Tunnels: Up to 2
- IPsec VPN Tunnels: Up to 16 tunnels
- SSL OpenVPN Modes: Server, Client
- SSL OpenVPN Encryption: Blowfish, AES-128/192/256
- SSL OpenVPN Authorization: TLS with RSA, Static Key
- SSL OpenVPN Hash Algorithm: MD4, MD5, SHA-1/256/512
- IPsec VPN Modes: Site-to-Site, Client-to-Site or Dynamic VPN
- IPsec Encryption: DES, 3DES, AES-128/192/256
- IPsec Hash Algorithm: MD5, SHA-1/256
- IPsec Key Exchange: IKEv1/2, Main/Aggressive Mode, Pre-shared key, X.509, DH Groups 1/2/5/14-18
- IPsec Protocols: ESP/AH, PFS DH Groups 1/2/5/14-18, X-AUTH, DPD, Local/Remote ID: FQDN, User@FQDN, Key ID
- IPsec NAT Traversal

### Performance

- NAT (LAN-to-WAN) throughput: 900Mbps
- Routing performance: 900Mbps
- Maximum concurrent sessions: 32,000
- Maximum number of VLANs: 4 (ID: 1-4091)
- IPsec VPN (AES-256/SHA-256/LAN-to-LAN) throughput: 160Mbps
- SSL VPN (OpenVPN®) Throughput (Blowfish/SHA-1/Server): 20Mbps

### Networking

- NAT Loopback Enable/Disable
- NAT Modes: NAT, PAT, One-to-One NAT
- VLAN tag assignment on WAN interface
- IPv4 WAN Modes: Dynamic IP (DHCP), Static IP, PPPoE, PPTP, L2TP
- Wireless WAN Mode: NAT enable/disable, Dynamic IP (DHCP), Static IP, fast roaming signal threshold/channels
- IPv6 WAN Modes: Static, Auto-configuration (SLAAC/DHCPv6), Link-Local, PPPoE
- VLAN ID assignment on WAN interface
- IGMP proxy on WAN interface
- WAN IP address alias
- Routing: Static (Up to 64 entries), RIPv1/v2, OSPFv2, BGP4
- Static ARP (Up to 32 entries)
- VLAN: Port-based, 802.1Q (Up to 4 VLANs, 4 IP interfaces)
- Inter-VLAN Routing
- SSID per VLAN assignment
- DHCP Server, Relay, Options 42/66/72/114/150/160
- Dynamic DNS: dyn.com, no-ip.com
- WAN Failover
- Networking monitoring for WAN load balancing (DNS query or ICMP, latency threshold, fail threshold, query threshold)
- WAN Traffic load balancing: Smart Weight (Automatic), Specific Weight Percentage, User defined traffic policy
- VPN passthrough: IPsec, PPTP, L2TP
- Up to 8 SSIDs per band
- AP Router, WDS only, and WDS hybrid modes
- WiFi scheduling
- 5G WiFi bandsteering

### Access Control

- Wireless encryption: WPA/WPA2-PSK, WPA/WPA2-RADIUS
- Wireless IDS
- Certificate management (Root CA, SCEP, Local certificate, self-signed, RSA, Import PEM certificates)
- NAT/SPI, virtual server/port forwarding, port triggering, firewall traffic rules, DMZ host, allow/deny ping on WAN interfaces
- ALG: PPTP/L2TP/IPsec VPN passthrough
- MAC filtering
- Custom scheduling for access control rules
- MMI (max. password attempts, login timeout, HTTP/HTTPS, HTTPS certificate, HTTP compares/binding)
- Wireless client isolation
- Stealth Mode
- DoS prevention

### Quality of Service

- Software-based priority queues
- Hardware-based bandwidth control
- WMM

### Management

- HTTP/HTTPS web-based GUI
- CLI: Telnet / SSHv2
- Command script
- TR-069/STUN
- SNMP v1, v2c, v3
- SNMP trap (up to 4 receivers)
- Modbus Slave, gateway for TCP, and RTU/ASCII master/slave access
- Virtual COM RFC2217, TCP client, TCP server, UDP
- Data logging (sniffer, offline proxy, full-time proxy)
- Device configuration backup & restore, upgrade firmware, reboot, and reset to default
- Scheduled auto reboot
- Auto restore configuration
- Set custom UI logo
- Set custom CSS
- Wake-on-LAN (WoL)
- Diagnostic tools: Built-in ping, traceroute, speed test, and packet capture utilities
- Event configuration and management: digital input/output, Modbus, syslog, SNMP trap, email alert, reboot
- System time settings (NTP, manually set, or copy from PC, time zone, and daylight savings time)
- FTP/FTPS/SFTP server
- Creates groups (IP, MAC, or host name), external server object definition

**MIB**

- MIB II RFC 1213

**Frequency**

- 2.412 - 2.462GHz
- 5.150 – 5.250GHz, 5.725 – 5.850GHz

**Modulation**

- 802.11b: CCK, DQPSK, DBPSK
- 802.11a/g: OFDM with BPSK, QPSK and 16/64-QAM
- 802.11n: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM with OFDM
- 802.11ac: OFDM with BPSK, QPSK and 16/64/256-QAM

**Media Access Protocol**

- CSMA/CA with ACK

**Antenna Gain**

- 4 x 2.4GHz 2.5dBi / 5GHz: 3.5 dBi dual-band detachable/external

**Wireless Output Power (max output power without antenna gain)**

- 802.11a: FCC: 21 dBm (max.) / ETSI: 17.38 dBm (max.)
- 802.11b: FCC: 26 dBm (max.) / ETSI: 17.38 dBm (max.)
- 802.11g: FCC: 23 dBm (max.) / ETSI: 17.38 dBm (max.)
- 802.11n (2.4GHz): FCC: 21 dBm (max.) / ETSI: 14.38 dBm (max.)
- 802.11n (5GHz): FCC: 21 dBm (max.) / ETSI: 16.4 dBm (max.)
- 802.11ac: FCC: 21 dBm (max.) / ETSI: 16.4 dBm (max.)

**Receiving Sensitivity**

- 802.11a: -68 dBm (typical) @ 54Mbps
- 802.11b: -83 dBm (typical) @ 11Mbps
- 802.11g: -70 dBm (typical) @ 54Mbps
- 802.11n (2.4GHz): -66 dBm (typical) @ 300Mbps
- 802.11n (5GHz): -64 dBm (typical) @ 300Mbps
- 802.11ac: -55 dBm (typical) @ 867Mbps

**Wireless Channels**

- 2.4GHz: FCC: 1 – 11, ETSI: 1 – 13
- 5 GHz: FCC: 36, 40, 44, 48, 149, 153, 157, 161, 165; ETSI: 36, 40, 44, 48

**Power**

- PWR (Primary) terminal input: 24 – 56V DC
- RPS (Redundant) terminal input: 24 – 56V DC
- Digital Input: Logic 0: 0V-2V, Logic 1: 5V-30V
- Digital Output: Relay Mode, up to 30V/1A
- Compatible power supply: TI-S12048 (120W), TI-S12024 (120W), TI-S24048 (240W) sold separately
- Max. Consumption: 20W (no PoE load), 140W (full PoE load)

**PoE**

- PoE budget: 120W@48V DC input, 120W@24V DC input
- 802.3at: Up to 30W per port
- PoE Mode A: Pins 1, 2, 3, and 6 for power
- PoE auto classification
- PoE port priority/power limit/power scheduling/PD alive check
- Over current/short circuit protection

**Terminal Block**

- Redundant power inputs, alarm relay contact, 8 pin
- Wire range: < 2.5 mm<sup>2</sup>
- Solid wire (AWG): 12-24
- Stranded wire (AWG): 12-24
- Wire strip length: 5mm

**Enclosure**

- IP30 rated metal enclosure
- Fanless passive cooling
- DIN-Rail mount
- Grounding point
- ESD (Ethernet) Protection: 8KV DC
- Surge (Power) Protection: 2KV DC

**MTBF**

- 333,367 hours @ 25° C
- 222,166 hours @ 70° C

**Operating Temperature**

- -30° – 70° C (-22° – 158° F)\*

**Operating Humidity**

- Max. 95% non-condensing

**Dimensions**

- 160 x 120 x 51mm (6.3 x 4.72 x 2.01 in.)

**Weight**

- 1.09kg (2.4 lbs.)

**Certifications**

- CE
- FCC
- Freefall (IEC 60068-2-32)

**Warranty**

- 3 year

**Package Contents**

- TI-WP100
- Quick Installation Guide
- 4 x detachable dual-band antennas
- Network cable (1.5m / 5 ft.)
- 1 x 8-pin removable terminal block (Power & digital input/output)
- 1 x 4-pin removable terminal block (Serial)
- DIN-Rail mounting bracket

\*WiFi performance will be degraded if device ambient temperature is above 60° C.

\*\*Maximum wireless signal rates are referenced from IEEE 802.11 theoretical specifications. Actual data throughput and coverage will vary depending on interference, network traffic, building materials and other conditions. For maximum performance of up to 867Mbps use with a 867Mbps 802.11ac wireless adapter. For maximum performance of up to 300 Mbps, use with a 300 Mbps 802.11n wireless adapter.

All references to speed are for comparison purposes only. Product specifications, size, and shape are subject to change without notice, and actual product appearance may differ from that depicted herein.